

Remarks

Claims 1-65 are pending in this application. Claims 1-54 stand rejected by the Examiner, and claims 55-65 have been withdrawn from consideration.

In the present Amendment, claim 1 and withdrawn claim 60 are amended, and no new claims are added. Withdrawn claim 60, which is drawn to a process of synthesizing the inventive compounds, has been amended to include all the limitations of the amended composition claims in order to preserve the Applicant's right to rejoinder. Support for the amendments to the definition of R³ in claims 1 and 60 can be found on page 48, paragraph [0134]. Applicant submits that no new matter has been added by these amendments and that the amended claims are now in condition for allowance. Applicant reserves the right to pursue the subject matter canceled from this case in future applications claiming priority to the present application.

Each of the rejections levied in the outstanding Office Action is addressed individually below.

I. Rejections under 35 U.S.C. § 102(b) and § 103(a) as being anticipated by or unpatentable over Schreiber *et al.* (WO 98/16830).

Claims 1-54 have been rejected by the Examiner under §§ 102(b) and 103(a), as being anticipated by or unpatentable over Schreiber *et al.* The Examiner maintains that Schreiber *et al.* discloses dioxanes, which share the same structure as the claimed compounds. The Examiner continues that "it would have been obvious to one of ordinary skill in the art at the time of the invention to select any of the species of the genus taught by the reference, including those instantly claimed, because the skilled chemist would have the reasonable expectation that any of the species of the genus would have similar properties, and thus, the same use as taught for the genus as a whole." Applicant disagrees. The presently amended claims are neither anticipated nor rendered obvious by Schreiber *et al.*

The amended claims are not anticipated by Schreiber *et al.* because Schreiber *et al.* does not teach all the limitations of the claimed invention. It is black letter law that a claim is only anticipated when each and every element of the claim is found in the prior art reference.

Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The amended claims recite a compound wherein "R³ is an aryl or or heteroaryl

moiety substituted with a moiety having the structure $-L-R^{4A}$, wherein L is a linker, and R^{4A} comprises a metal chelator.” The few compounds taught on pages 61-62 and in *Figure 18* of Schreiber *et al.* do not teach or even suggest a compound of claim 1. In particular, Schreiber *et al.* does not teach a metal chelating moiety as part of the disclosed compounds. Therefore, Schreiber *et al.* does not anticipate the claimed invention, and Applicant respectfully requests that rejection be withdrawn.

Furthermore, the amended claims are not rendered obvious by Schreiber *et al.* In order to establish a *prima facie* case of obviousness, there must be a suggestion or motivation either in the reference itself or in the knowledge generally available to one of ordinary skill in the art to modify the teaching of the reference. MPEP § 2143. The present application teaches and claims compounds that are useful as inhibitors of histone deacetylases (HDACs). HDACs are enzymes that catalyze the deacetylation of *N*-acetyl lysine residues of histone proteins as well as other proteins. These enzymes possess a zinc cation in their active site. See page 5, paragraph [0005] of the Specification of the present application. Therefore, the claimed compounds in order to function as inhibitors of HDACs include a metal chelating moiety. Schreiber *et al.* does not teach or suggest any use for the dioxane compounds disclosed therein, and it certainly does not teach or suggest the use of dioxane compounds as HDAC inhibitors. Therefore, there is no teaching or suggestion to select dioxane compounds with a metal chelating moiety as claimed in the present case. Without such a teaching or suggestion, the Examiner has not established a *prima facie* case of obviousness. Applicant, therefore, respectfully requests that the rejection be withdrawn.

In view of the forgoing amendments and arguments, Applicant respectfully submits that the present case is now in condition for allowance. A Notice to that effect is requested.

Please charge any fees that may be required for the processing of this Response, or credit any overpayments, to our Deposit Account Number 03-1721.

Respectfully submitted,



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